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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,686

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Hajime Nagai

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46852

7590

04/14/2009

LIU & LIU

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LOS ANGELES, CA 90071

EXAMINER

SUTEERAWONGSA, JARURAT

ART UNIT

PAPER NUMBER

2629

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,686	Applicant(s) NAGAI, HAJIME	
	Examiner JARURAT SUTEERAWONGSA	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/17/2006, 01/25/2008, 06/17/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because unlabeled rectangular boxes numbered 5, 6 and 7 of Fig. 1, boxes numbered 2 and 6 of Fig. 4, boxes numbered 21, A1, A2 and Am of Fig. 10, boxes numbered 6, 70 and 30 of Fig. 15, box numbered 30 of Fig. 16, box numbered 6 of Fig. 18 and boxes numbered 41 and 42 of Fig. 21 shown in the drawings should be provided with descriptive text labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2629

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

3. The disclosure is objected to because of the following informalities: the word chart of paragraph 43 is misspelled.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8-12 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: first converting means and first correction means.

6. It is unclear whether these claims consist of two converting means and two correction means (if so these claims should depend on claim 2) or are to further limit the voltage generating means consisting of a converting means and a correction means of claim 1 (for they functions similarly to the same set of data lines of claim 2). For the

Art Unit: 2629

purpose of examination on the merit, the “second” of correction means and the “second” converting means will be considered as a converting means and a correction means of voltage generating means of claim 1.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,841,411 to Francis.

8. As to claim 1, Francis discloses a voltage supplying device comprising: a first line (2); a second line (1) adjacent to said first line (see Fig. 1); and a voltage generating means (21) for generating a voltage supplied to said first line (2) and a voltage supplied to said first line, wherein said voltage generating means (21) receives a first data representing a first voltage (supplied data signal) for said first line (2) and a second data representing a second voltage (supplied data signal) for said second line (1), and generates a correction voltage different from said first voltage using said received first and second data (Col. 8, lines 25-35), and wherein said voltage supplying device supplies said first line with said correction voltage (Abstract).

9. As to claim 2, Francis discloses said voltage generating means (21) comprises: a first correction means (40) for generating a correction data (adjusted data signal) representing said correction voltage using said first and second data (Col. 8, lines 25-35 and Abstract); and a first converting means (D/A Converter) for converting said correction data into said correction voltage (Col. 11, lines 44-45).

Art Unit: 2629

10. As to claim 3, Francis discloses said first correction means (40) determines an amount of correction in data of said first data using said second data (Abstract), and generates said correction data by correcting said first data using said amount of correction in data (Abstract).

11. As to claim 4, Francis discloses voltage supplying device comprises a third line (3) adjacent to said first line (2), said third line (3) existing opposite said second line (1) (see Fig. 1), and wherein said voltage generating means (21) receives also a third data representing a third voltage for on said third line, and generates said correction voltage using said received first, second and third data (Abstract).

12. As to claim 5, see claim 2 above.

13. As to claim 6, Francis discloses said first correction means (40) generates said correction data using said first, second and third data (Abstract).

14. As to claim 7, Francis discloses said first correction means determines an amount of correction in data of said first data using said second and third data (Abstract), and generates said correction data by correcting said first data using said amount of correction in data (Abstract).

15. As to claim 8, Francis discloses said voltage generating means comprises: a converting means (D/A Converter) (Col. 11, lines 44-45) for converting said first data into said first voltage and converting said second data into said second voltage (Col. 6, lines 52-59); and a correction means (40) for generating said correction voltage using said first and second voltages (Abstract).

Art Unit: 2629

16. As to claim 9, Francis discloses said correction means (40) generates said correction voltage by correcting said first voltage using said second voltage (Abstract).

17. As to claim 10, see claim 4 above. Francis further said voltage generating means receives a third data for said third line, wherein said second converting means converts said received third data into said third voltage (Col. 6, lines 52-59 and Abstract).

18. As to claim 11, said correction means (40) generates said correction voltage by correcting said first voltage using said second and third voltages (Abstract).

19. As to claim 12, see claims 1-11 above. Francis further discloses an image display device (active matrix display device) (see Fig. 1 and Col. 6, line 3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JARURAT SUTEERAWONGSA whose telephone number is (571)270-7361. The examiner can normally be reached on Monday thru Thursday, 7:30AM to 4:30PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JARURAT SUTEERAWONGSA/
Examiner, Art Unit 2629

/Amr Awad/
Supervisory Patent Examiner, Art Unit 2629